



## **NOROVIRUS FACT SHEET FOR FOOD ESTABLISHMENTS**

**THE NOROVIRUS is the #1 cause of food borne illness in the United States.** The Centers for Disease Control and Prevention (CDC) estimates that 23 million cases of acute gastroenteritis (**illness with vomiting and diarrhea**) are due to Norovirus infection, and it is thought that **at least half of all food related outbreaks of gastroenteritis are caused by Noroviruses.** In many of these cases sick food-handlers were thought to be the cause.

Food and drinks can very easily be contaminated with Noroviruses. It only takes about 100 virus units to make a person sick. A particle the size of a grain of salt could hold millions of virus units. Food-handlers who are infected with Norovirus are a particular risk since he or she could easily, without meaning to, contaminate food or drinks served by the food establishment and cause a food-borne illness or outbreak.

Noroviruses cannot grow outside of a person's body, but they can survive outside of the body on food and other surfaces. They can withstand freezing temperatures and temperatures as high as 140°F (which is the minimum temperature for hot holding units or steam tables). They can survive in chlorinated drinking water.

### ***HOW DOES A PERSON BECOME ILL FROM THE NOROVIRUS?***

1. Eating foods or drinking beverages that are contaminated with the virus.
2. Touching surfaces or objects contaminated with the virus, and then placing hands into the mouth.
3. Direct contact with other persons infected with the virus (caring for an ill person, sharing food or utensils with someone ill).

Symptoms of a Norovirus infection are similar to many other food-borne illnesses. They usually include nausea, vomiting, diarrhea and abdominal cramps. The symptoms usually begin 24 to 48 hrs after ingestion of the virus and usually lasts 1 or 2 days.

The virus will be found in the feces and vomit of infected persons. An infected person can be contagious from when he or she begins feeling sick to at least 3 days after recovery (some people can even remain contagious for 2 to 3 weeks after recovery; the virus can be present in the vomit or feces that long). Generally,

food establishments should exclude employees who have been ill with diarrhea or vomiting for at least 3 days after their symptoms have ended. Alternatively, when possible, workers could be assigned restricted duties so they will not perform any job that could result in contamination of food or equipment. Because the virus can be present in the feces for 2 to 3 weeks after a person feels better, a recovered food handler must be especially careful about hand-washing, especially after using the restroom and before handling food.

***WHEN AN EMPLOYEE HAS CALLED IN SICK AND THEN RETURNED TO WORK, DO YOU ASK IF HIS OR HER SYMPTOMS INCLUDED VOMITING AND/OR DIARRHEA???? IF NOT, YOU SHOULD!!!!***

Any person can become infected by the virus; there are many different strains of noroviruses and people do not develop long lasting immunity.

**WHAT CAN A FOOD ESTABLISHMENT DO TO PREVENT THE SPREAD OF THE NOROVIRUS?**

1. Exclude ill workers (as discussed above).
2. Enforce good hygienic practices at all time. Ensure that workers wash hands frequently, especially after using the toilet and before handling food. Use soap and paper towels
3. Minimize bare hand contact, especially with ready-to-eat foods. Use suitable serving utensils and/or properly worn disposable gloves.
4. Clean and sanitize all food contact surfaces.

A chlorine bleach solution is effective for sanitizing and disinfecting surfaces. Standard non-scented household bleach (5.25% chlorine) is effective as a general sanitizer at a concentration of 200 ppm chlorine (approximately 1 Tablespoon bleach in 1 gallon of water).

Higher chlorine concentrations are necessary for surfaces directly contaminated with vomitus or feces/diarrhea. Be careful. Never mix bleach with anything but fresh water; other chemicals may react with bleach and create toxic chlorine gas. Also, chlorine can be corrosive or damaging to certain surfaces.

Quaternary Ammonia sanitizers (Quats) are not very effective against noroviruses.

Please contact the Department of Health for questions at the following:

Sanitation Branch – Oahu (808) 586-8000  
Sanitation Branch – Hilo (808) 933-0917  
Sanitation Branch – Kona (808) 322-1507

Sanitation Branch – Maui (808) 984-8230  
Sanitation Branch – Kauai (808) 241-3323  
Food and Drug Branch (808) 586-4725